

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Cast-Crete USA, Inc. P.O. Box 24567 Tampa, Florida 33623

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "Cast-Crete" 8 inch High Strength Precast and Pre-stressed Concrete Lintels

APPROVAL DOCUMENT: Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated June 12, 2014, signed and sealed by Craig Parrino, P.E., on August 19, 2014, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each lintel shall bear a permanent label with the manufacturer's name or logo and the Miami-Dade County logo.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 14-0903.02 and consists of this page 1, evidence submitted pages E-1, E-2, E-3, E-4, & E-5 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY APPROVED

Hely A. M. W. o4/28/2016 NOA No. 16-0126.03 Expiration Date: 05/21/2017 Approval Date: 04/28/2016

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #96-0613.01

A. DRAWINGS

1. Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", prepared by Craig Parrino, P.E., dated 06/07/96, revision #1 dated 11/08/96, sheet 1 of 1, and Drawing No. LT8, titled "Cast-Crete 8" Lintel Safe Load Tables", prepared by Craig Parrino, P.E., dated 06/07/97, revision #4 dated 04/28/98, sheet 1 of 1, both drawings signed and sealed by Craig Parrino, P.E.

B. TESTS

1. Test report on flexural testing on Precast and Pre-stressed Concrete Lintels Filled Models, total of (36) concrete lintel specimens, per ASTM E-529-94, prepared by Applied Research Laboratories, Report No. 29702B, dated 07/30/97, signed and sealed by Christopher A. Hamon, P.E.

C. CALCULATIONS

- 1. Calculations for Cast-Crete 8-inch Lintels, dated 06/06/96, 349 pages, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E.
- 2. Calculations for Cast-Crete 8-inch Lintels, dated 11/11/96, 45 pages, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E.

D. MATERIAL CERTIFICATIONS

- 1. Mill Certified Inspection Report Silo #4 dated April 1996 for cement by Southdown Brooksville Cement Laboratory.
- 2. Mill Certified Inspection Report #20-8275 dated 06/20/95 for pre-stressing strand by The Crispin Company.
- 3. Mill Certified Inspection Report #20-8345 dated 11/13/95 for pre-stressing strand by The Crispin Company.
- 4. Mill Certified Inspection Report #2111-078240 dated 04/25/96 for #3 rebar by Ameristeel.
- 5. Mill Certified Inspection Report #84-M19614 dated 02/29/96 for #5 rebar by Birmingham Steel Corp.
- 6. Mill Certified Inspection Report #58-A66332 dated 01/28/96 for #4 rebar by Birmingham Steel Corp.
- 7. Mill Certified Inspection Report #84-M20749 dated 04/05/96 for #5 rebar by Birmingham Steel Corp.
- 8. Mill Certified Inspection Report #84-M19805 dated 03/06/96 for #4 rebar by Birmingham Steel Corp.
- 9. Mill Certified Inspection Report #84-M21208 dated 04/21/96 for #4 rebar by Birmingham Steel Corp.
- 10. Mill Certified Inspection Report #84-M20652 dated 04/03/96 for #5 rebar by Birmingham Steel Corp.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor

Product Control Section Supervisor NOA No. 16-0126.03

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 11. Mill Certified Inspection Report #84-M20749 dated 04/05/96 for #5 rebar by Birmingham Steel Corp.
- 12. Quality Control Manual for Cast-Crete Machine Made Precast Lintels dated 05/14/96.
- 13. Ouality Control Manual for Pre-stressed Products dated 03/20/95.
- 2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #01-0209.03
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. MATERIAL CERTIFICATIONS
 - 1. None.
- 3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 03-0605.05
- A. DRAWINGS:
 - 1. Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheet 1 of 1, prepared by Craig Parrino, P.E., dated June 7, 1996, revision #2 dated January 28, 2003, and Drawing No. LT8, titled "Cast-Crete 8" Lintel Safe Load Tables", sheets 1 & 2 of 2, prepared by Craig Parrino, P.E., dated June 7, 1996, revision #5 dated March 24, 2003, all drawings are signed and sealed by Craig Parrino, P.E.
- B. TESTS:
 - 1. Test report on flexural testing on Precast Concrete Lintels Filled Models, total of (12) concrete lintel specimens, per ASTM E-529-94, prepared by Applied Research Laboratories, Report No. 30404B, dated 04/23/03, signed and sealed by Christopher A. Hamon, P.E.
- C. CALCULATIONS:
 - 1. Calculations for Cast-Crete High Strength Precast and Pre-stressed 8-inch Lintels, dated May 29, 2003, sheets 1.1 through 1.493 and 2.1 through 2.336, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E.
- D. MATERIAL CERTIFICATION:
 - 1. Quality System Manual for Cast-Crete Machine Made Precast Lintels revised on May 01, 2002.
 - 2. Cast-Crete Quality System Manual for Pre-stressed Products dated 2002.

Hemy A. Makar, P.E., M.S.

Product Control Section Supervisor

NOA No. 16-0126.03 Expiration Date: 05/21/2017

Approval Date: 04/28/2016

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0222.01

- A. DRAWINGS
 - 1. Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated February 17, 2006, signed and sealed by Craig Parrino, P.E.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. By Miami-Dade Building Code Compliance Office.
- E. MATERIAL CERTIFICATION
 - 1. None.
- F. OTHER
 - 1. Letter from Cast-Crete Corporation, dated 02/20/2006, signed by Craig Parrino, P.E.
- 5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 11-0121.04
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. OUALITY ASSURANCE
 - 1. By Miami-Dade Building and Neighborhood Compliance Department (BNC).
- E. MATERIAL CERTIFICATION
 - None.
- F. OTHER
 - 1. Letter from Cast-Crete Corporation, dated January 18, 2011, signed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2007 Edition.

Helmy A. Makar, P.E., M.S.

Product Control Section Supervisor

NOA No. 16-0126.03

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #12-0209.13

A. DRAWINGS

1. Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated February 17, 2006, signed and sealed by Craig Parrino, P.E., on March 22, 2012.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. OUALITY ASSURANCE

1. By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs.

E. MATERIAL CERTIFICATION

1. None.

F. OTHER

1. Letter from Cast-Crete Corporation, dated 02/03/2012, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2010 Edition.

7. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #14-0903.02

A. DRAWINGS

1. Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated June 12, 2014, signed and sealed by Craig Parrino, P.E., on August 19, 2014.

B. TESTS

1. None.

C. CALCULATIONS

1. Calculations for High Strength Precast and Pre-stressed 8-inch Lintels, dated August 19, 2014, sheets 14.101 through 14.124, prepared, signed, sealed by Craig Parrino, P.E.

D. OUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATION

1. None.

F. OTHER

1. Letter from Cast-Crete USA, Inc., dated August 19, 2014, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2014 Edition.

Helmy A. Makar, P.E., M.S.

Product Control Section Supervisor NOA No. 16-0126.03

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 8. NEW EVIDENCE SUBMITTED
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. By Miami-Dade County Department of Regulatory and Economic Resources (RER).
- E. MATERIAL CERTIFICATION
 - 1. None.
- F. OTHER
 - 1. Letter from Cast-Crete USA, Inc., dated January 13, 2016, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2014 Edition.

Henry A. Makar, P.E., M.S.

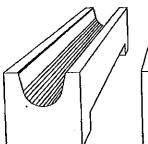
Product Control Section Supervisor NOA No. 16-0126.03



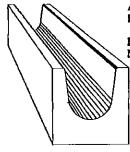
HIGH STRENGTH PRECAST AND PRESTRESSED CONCRETE LINTELS

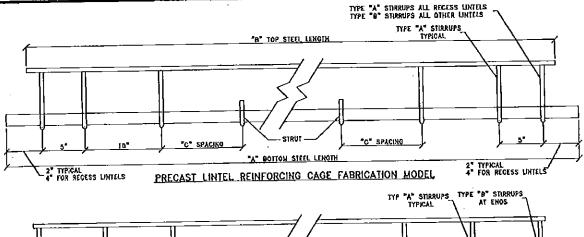
PRODUCT RENEWED as complying with the Florida **Building Code**

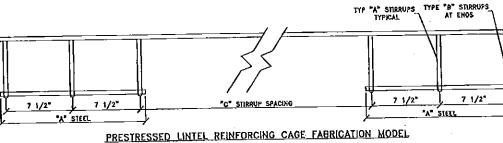
Acceptance No/6-0/26.
Expiration Date 05/21/2





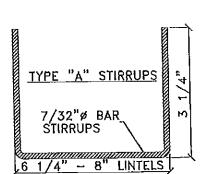


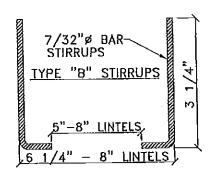




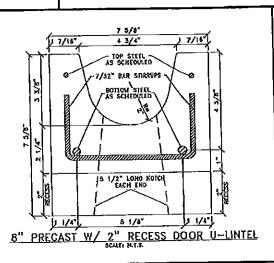
8" PRECAST W/ 2" RECESS DOOR U-LINTEL

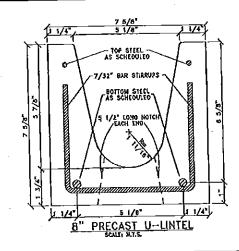
8" PRECAST U-LINTEL 8" PRESTRESSED U-LINTEL

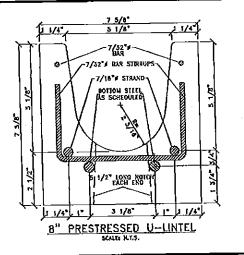




STIRRUP DETAILS







8" PRESTRESSED U-LINTEL DATA TABLE

LINTEL	AOLOME,	WEIGHT LOS	" <u>A</u> " S	TEEL LENGTH	" B " TOP	STEEL LENGTH	SPAČING	NO. OF STIRRUPS
14'-8"	0,134	542	7/32 BAR	1'-3"	7/32 BAR	14'-6"	4 9 3'-0"	9
15'-4"	0.140	567	7/32 BAR	1'-3"	7/32 BAR	15'-2"	4 0 3 -2"	9
17'-4"	0,158	639	7/32 BAR	1'-3"	7/32 BAR	17'∽2"	4 0 3'-8"	9
19'-4"	0.176	713	7/32 BAR	1'-3"	7/32 BAR	19'-2"	4 ⊕ 4'-2"	9
21'-4"	0.194	787	7/32 BAR	1'-3" 15'-0"	7/32 BAR	21'-2"	5 @ 3'-8 3/4"	10
22'-0"	0.200	811	7/32 BAR	1'-3"	7/32 BAR	21'~10"	5 6 3'-10 3/8'	10
24'-0"	0.219	885	7/32 BAR	18'-0"	7/32 BAR	23'-10"	5 @ 4'-3 1/8"	10

8" PRECAST W/ 2" RECESS DOOR U-LINTEL DATA TABLE

LINTEL	OVERALL LENGTH	RECESS LENGTH	VOLUME:	WEIGHT	" A " BOTT	DM STEEL LENGTH	" 8 " TO TYPE		"C" SPACING	STRRUPS
2'-8"	4'-4"	3'-0"	0.036	146	#3 REBAR	PLUS HOOK	7/32 BAR	3'~8"	N/A	4
3'-0"	4'-6"	3'-4"	0.037	150	#3 KEBAK	letus iloox	1/32 BAK	3'-10"	N/A	4
4'-0"	5'-8"	4'-4"	0.047	190	#3 REBAR	PLUS HOOK	7/32 BAR	5'-0"	N/A	6
4'-4"	5'-10"	4'-8"	0.047	190	#3 REBAR	PLUS 1100K	7/32 BAR		N/A	6
5'⊷0"	6'-8"	5'-4"	0.054	219	#4 REBAR	PLUS HOOZ			N/A	6
6'-0"	7'-6"	6'-4"	0.060	243	#4 REBAR	FLUS ROOM	RI DEGIND	6'-10"		6
8'-0"	9'-8"	8'-4"	0.078	316	#4 REBAR	PIUS 8003	HA DEDAD	9'-0"	2'-0"	8

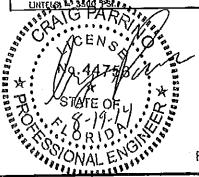
PRECAST U-LINTEL DATA TABLE

Γ	LINTEL	VOLUME	WEIGHT		OM STEEL	" B " 10	P SIEEL	SPACING	siruis/
ì	SIZE	ČΥ	LBS	TYPE	LENGTH	TYPE	LENGTH	SPACING	STIRRUPS
1	3'~6"	0.032	126	#3 REBAR	3'-5"	7/32 BAR	3'-2"	N/A	4
	4'-0"	0.037	144	#3 REBAR	3'-11"	7/32 BAR	3'-8"	N/A	4
	4'-6"	0,041	162	#3 REBAR	4'-5"	7/32 BAR	4'-2"_	N/A	4
	5'-4"	0.049	192	#3 REBAR	5'-3"	7/32 BAR	5'-0"	N/A	6
	5'-10"		210	#3 REBAR	5'-9"	7/32 BAR	5'-6"	N/A	6
	6'-6"	0.060	234	#4 REBAR	6'-5"	7/32 BAR	6'-2"	N/A	- 6
	7'-6"		270	#4 REBAR	7'-5"	7/32 BAR	7'-2"_	N/A	6
	9'-4"	0.086	336	#4 REBAR	9'-3"	#3 REBAR	9'-0"	2'~0"	
	10'-6"		378	#4 REBAR	10'-5"	#3 REBAR	10'-2"	2'-0"	
	11'-4"		408	#5 REBAR		#3 REBAR	11'-0"	3'-0'	
	12'-0"		432	#5 REBAR	111-11"	#3 REBAR	11'-8"	3'-0'	
	13'-4"		480	#5 REBAR	+	#3 REBAR	13'-0"	3,-0,	
	14'~0"		504	#5 REBAR	13'-11'	#3 REBAR	13'-8"	3,-0,	8
	<u> </u>	V. 1 P. V		1.6					

THIS PROPRIETARY INFORMATION IS PROVIDED FOR PRODUCT APPROVAL. IT IS PROTECTED BY COPYRIGHT LAWS AND CANNOT BE REPRODUCED OR DISTRIBUTED WITHOUT THE PRIOR WRITTEN CONSENT OF CAST-CRETE USA, INC.

GENERAL NOTES:

- REINFORCING STEEL: 7/32 BAR ASTM ASTO; #3, #4, 5, NOTE: THE TOTAL NUMBER OF STIRRUPS AND #5 REBAR GRADE 60 ASTM A615; 7/18 INCH DIAMETER 270KSI LOW-RELAXATION PRESTRESSING SRTAND ASTN A416.
- CONCRETE STRENGTHS: f'o = 6000 PSI FOR B" PRESTRESSED LINTELS; I'c = 4000 PSI FOR ALL PRECAST B INCH LINTELS.
- INITIAL PRESTRESS FORCE = 0.70 x fpu.
- REQUIRED IS COUNTED STARTING FROM EACH END OF THE REINFORCING CAGE; FOR EXAMPLE - NO. OF STIRRUPS = 4, THEN THE REINFORCING CAGE MODEL SHOWS 2 STIRRUPS FROM EACH END.
- 6. 2.5 POUNDS OF POLYPROPYLENE FIBERS PER CU.YD. OF CONCRETE MAY BE USED IN LIEU OF PRESTRESSED LINTEL REINFORCING CAGE TO RESIST LIFTING AND HANDLING FORCES.



PRODUCT REVISED as complying with the Florida Findleing Code Acceptance No 4 Baptistion Date 05/21/2016

6324 CR 579 SEFFNER, FL 33584

CRAIG PARRINO FL. P.E. LIC. NO. 44756

CAST_COUTE 8" LINTEL FARRICATION DETAILS





Title:	CA21-	CKEIL	0	LIIN	1 1	L	LADI	IOMITO			$\stackrel{\smile}{-}$
ENE MAUF.	DBSUB1-14	DRAWN BY:	CRAIG F	PARRINO,	P.E	REG.	NO. 44756	SCALE:	NOT TO	SCALE	
DATE:	06/07/96	CHECKED BY:							Ro. FDB	SHEET 1 OF 3	3

SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

America America	SAFE LOAD - POUNDS PER LINEAR FOOT)T	
CWEL-CHELE.								
TYPE	808	8F8~0B			8F20-0B			8F32-0B
LENGTH		8F8-1B	8F12-1B		8F20~1B			8F32-1B
3'-6" (42") PRECAST	2231	3069	3719	5163	6607	8054	9502	10951
3 -0 (+2) FILLOASI	2201	3069_	4605	6113	7547	8974	10394	11809
4'-0" (48") PRECAST	1966	2561_	2751	3820	4890	5961	7034	8107
- (10) Theorem	1000	2693	4605	6113	7547	8974	10394	11809
4'6" (54") - PRECAST	1599	1969_	2110	2931	3753	4576	5400	6224
	1000	2189	4375	6113	7547 (1)	8672	10294	11809
5'4" (64") PRECAST	1217	1349	1438	1999	2560	3123	3686	4249
3 4 (64) Theorisi	12.17	1663	3090	5365	7547 (ss)			
5'-10" (70") PRECAST	1062	1105	1173	1631	2090	2549	3009	3470
	1002	1451	2622	4360	7168 (is)			
6'-6" (78") PRECAST	908	1238	2177	3480	3031	3707	4383	5061
		1238	2177	3480	5381	8360	10394(17)	8825 (ı 3685
7'-6" (90") PRECAST	743	1011	1729	2632	2205	2698	3191	·
		1011	1729	2661 1625	3898	5681 3486	8467 (4) 2818	6472 (ı 3302
9'-4" (112") PRECAST	554	699	1160		2564		ļ	
		752	1245	1843	2564	3486 2777	4705ga	6390 (c 2536
10'-6" (126") PRECAST	475	535	890	1247	2093			+
		643	1052 945	1533	2093 1846	2781 2423	3643 _{(se}	4754 <u>(</u> 4006
11'-4" (136") PRECAST	362	582	+	1366	+	2423	3127	4006
	<u> </u>	582	945	1366	1846	2193	2805	3552
12'-0" (144") PRECAST	337	540	873	1254	1684	2193	2805	3552
	 	540 471	873 755	1254 1075	1428	1838	2316	2883
13'-4" (160") PRECAST	296		755	1075	1428	1838	2316	2883
	 -	471 424	706	1002	1326	1697	2127	2630
14'-0" (168") PRECAST	279	442	706	1002	1326	1697	2127	2630
ļ <u>.</u>	 	NR	NR	NR	NR	NR	NR	NR
14'-8" (176") PRESTRESSED	N.R.	458	783	1370	1902	2245	2517	2712
	 	NR	NR	NR	NR	NR	NR	NR
15'-4" (184") PRESTRESSED	N.R.	412	710	1250	1733	2058	2320	2513
<u> </u>	+	NR	NR	NR	NR	NR	NR	NR
17'-4" (208") PRESTRESSED	N.R.	300	548	950	1326	1609	1849	2047
	+	NR	NR	NR	NR	NR	NR	NR
19'-4" (232") PRESTRESSED	N.R.	235	420	750	1037	1282	1515	1716
	+	NR	NR	NR	NR	NR	NR NR	NR
21'-4" (256") PRESTRESSED	N.R.	180	340	598	845	1114	1359	1468
	+	NR	NR	NR	NR	NR	NR	NR
22'-0" (264") PRESTRESSED	N.R.	165	315	550	784	1047	1285	1399
	1	NR	NR	NR	NR	NR	NR	NR
24'-0" (288") PRESTRESSED	N.R.	129	250	450	654	884	1092	1222

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE NO. 4 ON SHEET 3 OF 3.

SAFE LATERAL LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

8" PRECAST & PRESTRESS			AD.
CAST-CHETE	AG	FE LO	ער
LENGTH	8U8	8F8	RCMU
3'-6" (42") PRECAST	1025	1024	1598
4'-0" (48") PRECAST	765	763	1309
4'-6" (54") PRECAST	592	591	1073
5'-4" (64") PRECAST	411	411	745
5'-10" (70") PRECAST	340	339	616
6'-6" (78") PRECAST	507	721	490
7'-6" (90") PRECAST	424	534	363
9'-4" (112") PRECAST	326	512	230
10'-6" (126") PRECAST	284	401	180
11'-4" (136") PRECAST	260	452	154
12'-0" (144") PRECAST	244	402	137
13'-4" (160") PRECAST	217	324	110
14'-0" (168") PRECAST	205	293	100
14'-8" (176") PRESTRESSED	N.R.	284	91
15'-4" (184") PRESTRESSED	N.R.	259	83
17'-4" (208") PRESTRESSED	N.R.	194	64
19'-4" (232") PRESTRESSED	N.R.	148	52
21'-4" (256") PRESTRESSED	N.R.	125	42
22'-0" (264") PRESTRESSED	N.R.	116	40
24'-0" (288") PRESTRESSED	N.R.	91	33
+ OFC OFUERIL NOTE NO	40.00	CUCCT ?	2 05 3

* SEE GENERAL NOTE NO. 18 ON SHEET 3 OF 3.

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 16-0126.

Expiration Date 05 1211201

By te A. Miami Dado Product Control

SAFE UPLIFT LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

CAST-CHETE'	SAFE LOAD - POUNDS PER LINEAR FOOT							
TYPE	8F8-1T	8F12~1T	BF16-1T	8F20-11	8F24-1T	8F28-1T	8F32-1T	
ENGTH	8F8-2T	8F12~2T	8F16-2T	8F20-2T	8F24-2T	8F28-2T	8F32~2T	
	1569	2655	3524	4394	5263	6132	7001	
5'-6" (42") PRECAST	1569	2655	3524	4394	5263	6132	7001	
1 cl. (10ll) DDF010T	1363	2305	3060	3815	4570	5325	6079	
1'-0" (48") PRECAST	1363	2305	3060	3815	4570	5325	6079	
I' C" (CI") DDECACT	1207	2040	2707	3375	4043	4711	5379	
1'6" (54") PRECAST	1207	2040	2707	3375	4043	4711	5379	
of an Analy population	1016	1715(11)	2276 (4)	2838	3399	3961	4522	
5'-4" (64") PRECAST	1016	1715	2276	2838	3399	3961	4522	
T 40" (70") DD5040T	909	1567(Ia)	2080(13)	2593 (n	3107 (6)	3620 (1)	4133 (
5'10" (70") PRECAST	929	1567	2080	2593	3107	3620	4133	
o' o" (zo") DOCOLOT	835 (12)	1407(26)	1868(21)	2329 ₍₁₈₎	2790(18)	3251(11)	3712(
6'-6" (78") PRECAST	835	1407	1868	2329	2790	3251	3712	
with all facility community	727 (23)		1624(31)	2025 (28)	2426(26)	2827(2)	3228	
7'-6" (90") PRECAST	727	1224	1624	2025	2426	2827	3228	
at all freely page of	591	708 (x)		·			2500	
9'-4" (112") PRECAST	591	862	1318	1643	1969	2294	2619	
	530	575 (24)				1736 ₍₃₎	2011	
10'-6" (126") PRECAST	530	695	1180 (6)	1			2346	
	474	504 (z)						
11'-4" (136") PRECAST	494	607	1042(10)			_	1	
	470 g	+					-	
12'-0" (144") PRECAST	470	550	940 (10					
	418 (15							
13'-4" (160") PRECAST	428	460	780 (s	7				
	384 (is	 			7			
14'-0" (168") PRECAST	410	425	717 (9	-		1		
	239	334 (a)						
14'-8" (176") PRESTRESSED	246	395	663 g	1	1			
. n.t. in pararageages	224	313 (2)						
15'-4" (184") PRESTRESSED	230	368	616 (-г	
11 (11 (nnoll)	187	263_(1						
17'-4" (208") PRESTRESSED	192	306	506 (_1				
and all forage programments	162	229 (1		<u> </u>				
19'-4" (232") PRESTRESSED	166	263	429 (
att di (arab) aprovaración	142	204 μ						
21'-4" (256") PRESTRESSED	142	232	373					
and all (and the present the same	137	197 (1	_					
22'-0" (264") PRESTRESSED	137	223	358					
	124	179 (1					1	
24'-0" (288") PRESTRESSED	124	202	319		-			

(#) THE MUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 DELLA RODED REPART SEE GENERAL NOTE NO. 4 ON SHEET 3 OF 3.

STATE OF 14 H

CRAIG PARRINO 6324 CR 579 SEFFNER, FL 33584 FL. P.E. LIC. NO. 44756 PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 14-0903.07
Explantion Date 25/21/201

By Midht Dade Poblici Control

SEE GENERAL NOTES - SHEET 3 OF 3

NO. BY	REVISION	DATE	
ΔCP	GENERAL REVISION NUMBER ONE	11/08/96	,
∆ ICP	RECESS TYPE DESIGNATION	112/30/96	
ACP	8U8 11'-4" THRU 14'-0"	111/08/96	MEMBER OF
AICP	GENERAL REVISION	4/24/98	CONTRACTOR OF THE PART OF THE
∆ CP	GENERAL REVISION	5/24/03	CONCRETE WASONAY ASSOCIATION
<u> AICP</u>	NAME CHANGE	2/17/06	}
LØICP	GENERAL REVISION	<u>10/12/14</u>	<u> </u>



TITUE: CAST-CRETE 8" LINTEL FABRICATION DETAILS

FILE HAME:	DBSUB2-14	DRAWN BY:	CRAIG PARRINO, P.E REG. NO. 44756	SCALE: NOT TO SCALE
DATE:	06/07/95	CHECKED BY:	CRAIG PARRINO, P.E REG. NO. 44756	DRAWING HO. FOR SHEET 2 OF 3

SAFE GRAVITY LOADS FOR 8" PRECAST W/ 2" RECESS DOOR U-LINTELS

CAST-CHOTE	SAFE LOAD - POUNDS PER LINEAR FOOT								
TYPE		8RF6-08	8RF10-0B	8RF14-08	8RF18-0B	8RF22-08	8RF26-0B	8RF30-0B	
LENGTH	8RU6	8RF6~1B	8RF10-1B	8RF14-19	8RF18-1B	8RF22-18	8RF26-1B	8RF30-1B	
A A ACON PRESION	1075	1749	3355	3280	4349	5421	6493	7567	
4'-4" (52") PRECAST	1635	1891	3699	5206	6639	8060	9479	10893	
I all (E III) POPOACY	1404	1596	3063	2992	3968	4946	5924	6904	
4'-6" (54") PRECAST	1494	1756	3699	5206	6639	8060	9479	10893	
5'-8" (68") PRECAST	000	920	1770	1716	2277	2839	3402	3966	
3-6 (00) FRECASI	866	1167	2481	4567	6389	8060 _(st)	7917(19)	9311(19)	
5'-10" (70") PRECAST	010	859	1653	1600	2124	2649	3174	3700	
3 - 10 (70) TRECAST	810	1113	2342	4242	6639 (10)	8060(s)	7402(19)	8706 (13)	
el nii (anii) ppenaet	707	901	1825	3120	5048	7747	9448	7360	
6'-8" (80") PRECAST	797	901	1825	3120	5048	7915	9479	10893(32)	
7'6" (90") PRECAST	cco	755	1490	2459	3776	5743	7239	5623	
/ -0 (90) PRECASI	669	755	1490	2459	3776	5743	8998(19)	10893(4)	
9'-8" (116") PRECAST	444	466	999	1568	2253	3129	4091	3146	
9 -0 (110) FIXECASI	411	526	999	1568	2253	3129	4150	5891 (47)	

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR, SEE GENERAL NOTE NO. 4

* SEE GENERAL NOTE 18

LENGTH

SAFE UPLIFT LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LINTELS

CAST-	С мата	SAFE LOAD - POUNDS PER LINEAR FOOT								
	TYPE	8RF6-1T	8RF10-1T	8RF14-1T	8RF18-17	8RF22-1T	8RF26-1T	8RF30-1T		
LENGTH		8RF6-2T	8RF10-2T	8RF14-2T	8RF18-2T	8RF222T	8RF26-2T	8RF30-21		
41 411 (CON)	DOCOTOL	905	166B	2362	3056	3751	4445	5140		
4'-4" (52")	PRECASI	905	1668	2362	3056	3751	4445	5140		
11 CH (C18)	DDEGACT	867	1604	2272	2939	3607	4275	4943		
4'-6" (54")	PRECASI	867	1604	2272	2939	3607	4275	4943		
5'-8" (68")	ODECACE	675	1269(16)	1797	2326 (5)	2854 (2)	3382	3911		
3-0 (00)	LIVEOVOI	675	1269	1797	2326	2854	_3382	3911		
5'-10" (70")	DRECAST	655	1207(18)	1748(11)	2259 (1)	2773 (5	3286 (s)	2799 (1)		
3-10 (70)	TALOASI	655	1233	1746	2259	2773	3286	2799		
c' a" (00"\	DDCAACT	570	929 (16)	1530(2)	1980 (19)	2429(16	2879(15)	3329 (11)		
6'-8" (80")	PRECASI	570	1080	1530	1980	2429	2879	3329		
7'-6" (90")	DDECAST	506	742 (16)	1364(x)	1765 (27	2166(25	2567(21)	2968(2)		
/ =0 (90)	FNEUASI	506	898	1364	1765	2166	2567	2968		
9'-8" (116")	DRECAST	395	468 (15) 884 (y	1222 (3)	1540เม	1859 (34)	2180 (51		
9-0 (110)	FINECASI	395	560	1072	1386	1701	2016	2331_		

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE NO. 4

GENERAL NOTES

- 1) Materials:

 - otenois:

 1'c 8" precost lintel = 4000 psi
 1'c prestressed lintel = 6000 psi
 1'c grout = 3000 psi with maximum 3/8 inch aggregate
 concrete masonry units (CNU) per ASTM C90 with minimum net orea compressive strength = 1900 psi
 rebor per ASTM A615 Grade 60
 prestressing strand per ASTM A416 Grade 270 low reloxation
 mortor per ASTM C270 Type M or S
- All safe load tables based on minimum 4 inch nominal bearing. <u>Exception</u>; Sofe loads for lintel type 8U8 and 8RU6 must be reduced by 20% if bearing length is less than 6 1/2 inches.
- 3) Provide full mortar bed and head joints.
- 4) The number in parenthesis indicates the percent reduction for grade 40 field added rebor.

Example: 7'-6'' Lintel 8F32-18 sole gravity load = 6472 (15) $\frac{1}{12}$ reduction $\frac{1}{12}$ 6472 (85) = 5501 pli

- 5) All lintels meet or exceed L/360 deflection.

 Exception: Prestress lintel type 8F8 17'-4" and longer meets or exceeds L/180 deflection. Use is limited to conditions meeting the Florida Building Code Sections 1604.3.1 as applicable
- 6) Shore filled lintels as required.
- 7) One #7 rebor may be substituted for two #5 rebors.
- 8) installation/attachment of lintel must comply with the architectural and/or structural documents.
- The designer may evaluate concentrated loads from the safe load tables by calcutating the maximum resisting moment and shear at d-away from the
- 10) NR = Not Rated
- 11) Bottom field added rebur to be localed at the bottom of the lintel cavity.

- 12) Lintels are manufactured with 5-1/2 long notches at the ends to accompdate vertical cell reinforcing and grouting.
- 13) The exterior surface of lintels installed in exterior concrete mosonry walls shall have a coating of stucco applied in accordance with ASTM C-926 or other approved coating.
- 14) Lintels loaded simultaneously with vertical (gravity or uplift) and harizontal (toteral) loads should be checked for the combined loading with the following equation:

 $\frac{\text{Applied vertical load}}{\text{Safe vertical load}} + \frac{\text{Applied horizontal load}}{\text{Safe horizontal load}} \leq 1.0$

- 15) For composite lintel heights not shown, use safe load from next lower height shown.
- (6) For lintel lengths not shown, use safe load from next longest length shown.
- 17) Sale loads are superimposed allowable loads.
- 18) Safe loads based on rotional design analysis per ACL 530 and ACL 318
- 19) Additional lateral load capacity can be obtained by the designer by providing additional reinforced concrete masonry units (RCMU) above the lintel. See sketch below:

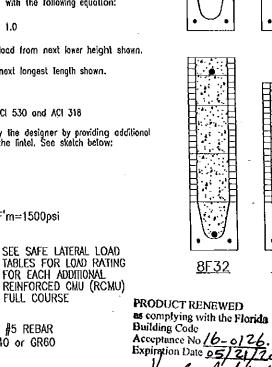
F'm=1500psi

FOR EACH ADDITIONAL

FULL COURSE

(2) #5 REBAR

GR40 or GR60



SAFE LATERAL LOADS FOR

8" PRECAST w/ 2" RECESS DOOR U-LINTELS

Cast-Cagre

4'-4" (52") PRECAST

4'-6" (54") PRECAST

5'-8" (68") PRECAST

5'-10" (70") PRECAST

6'-8" (80") PRECAST

7'-6" (90") PRECAST

9'-8" (116") PRECAST

SAFE LOAD

PLF

8RF6

757

693

407

381

788

674

490

808

8RU6

758

694

408

382

595

509

370

RCMU

1164

1073

655

616

464

363

214

<u>8F8</u>

8F12

8F16



- F = FILLED WITH GROUT / U ≈ UNFILLED QUANTITY OF \$5 REBAR AT BOTTOM OF LINTEL CAVITY 8F16-1B/IT HTOW JANINON QUANTITY OF 15 NOMINAL HEIGHT REBAR AT TOP 5 REBAR AT TOP MIN. (1) REQ'D 1-1/2 CLEAR FIGH GROUT #5 REBAR AT BOTTOM OF LINTEL CAVITY BOTTOM REINFORCING PROVIDED IN LINTEL ,7-5/8" ACTUAL (VARIES) 8' NOMINAL WIDTH

TYPE DESIGNATION

PRODUCTREVISED as complying with the Florida Building Code Acceptance No 14 Exployion Date & 5/11/2

1/08/90

MEMBER OF

1/2" CLR TYP



CAST-CRETE 8" LINTEL FABRICATION DETAILS

6324 CR 579

-	FILE NAME: DBSUB3-14	DRAWN BY: CRAIG PARRINO, P.E REG. NO. 44756	SCALE: NOT TO SCALE
	DATE: 06/07/96	CHECKED BY: CRAIG PARRINO, P.E REG. NO. 44756	DRAWING No. FD8 SHEET 3 OF 3